

Video Capture Card Selection Guide



Low Power Consumption | **No Heatsink Required** | **RealTime Audio/Video Capture** | **Free Argus Surveillance Software Bundle**



Model Name	IVC-168G	IVC-268G	IVCE-268G	PM-6814	PM-6844
Formfactor	PCI	PCI	PCIe	PCI-104	PCI-104
◆ Interface					
Video input	4 channels composite video NTSC/PAL/SECAM auto sensing	4 channels composite video NTSC/PAL/SECAM auto sensing	4 channels composite video NTSC/PAL/SECAM auto sensing	4 channels composite video NTSC/PAL/SECAM auto sensing	4 channels composite video NTSC/PAL/SECAM auto sensing
Video input type	BNC	BNC	BNC	BNC	BNC
Audio input	1 channel analog audio Active channel selectable by software	4 channel analog audio	4 channel analog audio	1 channel analog audio Active channel selectable by software	4 channel analog audio
Audio input type	Audio kit with 3.5 mm audio jack connector	Audio kit with 3.5 mm audio jack connector	Audio kit with 3.5 mm audio jack connector	Audio kit with 3.5 mm audio jack connector	Audio kit with 3.5 mm audio jack connector
PCI / PCI-104 interface	PCI Rev 2.1 compliance	PCI Rev 2.1 compliance	PCIe x1	PCI Rev 2.1 compliance	PCI Rev 2.1 compliance
Alarm I/O	Yes	Yes	Yes	Yes	Yes
Card ID	DIP switch selectable with LED for ID indication	DIP switch selectable with LED for ID indication	DIP switch selectable with LED for ID indication	DIP switch selectable with LED for ID indication	DIP switch selectable with LED for ID indication

◆ Video processing					
Video compression	Software compression		Software compression		Software compression
Video engine	1 x Techwell TW6805		4 x Techwell TW6805		4 x Techwell TW6805
Resolution & frame rate	NTSC:	PAL / SECAM:	NTSC:	PAL / SECAM:	NTSC:
	720 x 480	720 x 576	720 x 480	720 x 576	720 x 480
	720 x 240	720 x 480	720 x 240	720 x 480	720 x 240
	640 x 480	720 x 288	640 x 480	720 x 288	640 x 480
	640 x 240	720 x 240	640 x 240	720 x 240	640 x 240
	320 x 240	704 x 576	320 x 240	704 x 576	320 x 240
	160 x 120	704 x 288	160 x 120	704 x 288	160 x 120
		640 x 480		640 x 480	
		640 x 240		640 x 240	
		352 x 288		352 x 288	
	320 x 240		320 x 240		
	176 x 144		176 x 144		
	160 x 120		160 x 120		
	NTSC: Total 30fps@D1 for 4 channels PAL/SECAM: 25fps@D1 for 4 channels		NTSC: Total 120fps@D1 for 4 channels PAL/SECAM: 100fps@D1 for 4 channels		NTSC: Total 120fps@D1 for 4 channels PAL/SECAM: 100fps@D1 for 4 channels

◆ Audio processing					
Audio compression	Software compression		Software compression		Software compression
Sampling rate	8 kHz, 32 kHz, 44.1 kHz and 48 kHz (hardware spec.)		8 kHz, 32 kHz, 44.1 kHz and 48 kHz (hardware spec.)		8 kHz, 32 kHz, 44.1 kHz and 48 kHz (hardware spec.)
Quantization	8-bit, 16-bit and 24-bit (hardware spec.)		8-bit, 16-bit and 24-bit (hardware spec.)		8-bit, 16-bit and 24-bit (hardware spec.)

◆ Functionality					
Video /audio synchronization	Yes	Yes	Yes	Yes	Yes
Video loss detection	Yes	Yes	Yes	Yes	Yes
On-screen display	Yes	Yes	Yes	Yes	Yes
Motion detection	Yes	Yes	Yes	Yes	Yes
Watermarking	N/A	N/A	N/A	N/A	N/A

◆ System requirement					
System	x86 compatible computer		x86 compatible computer		x86 compatible computer
Memory	256 MB or above		256 MB or above		256 MB or above
Graphic	DirectX compatible VGA card supporting YUV overlay mode		DirectX compatible VGA card supporting YUV overlay mode		DirectX compatible VGA card supporting YUV overlay mode

◆ Software support					
Device driver	Windows® 2000, XP Linux kernel 2.6	Windows® 2000, XP Linux kernel 2.6	Windows® 2000, XP Linux kernel 2.6	Windows® 2000, XP Linux kernel 2.6	Windows® 2000, XP Linux Kernel 2.6
SDK	Provide SDK and demo program with sample source code in C++		Provide SDK and demo program with sample source code in C++		Provide SDK and demo program with sample source code in C++
Surveillance software support	Yes	Yes	Yes	Yes	Yes

◆ Others					
Dimensions	119.91 mm x 106.68 mm	119.91 mm x 106.68 mm	119.91 mm x 106.68 mm	95.89 mm x 90.17 mm	95.89 mm x 90.17 mm
Operation temperature	0°C~60°C (32°F~140°F), non-condensing		0°C~60°C (32°F~140°F), non-condensing		0°C~60°C (32°F~140°F), non-condensing
Power consumption	10W, 2A@5V (with relay)	12W, 2.4A@5V (with relay)	12W, 1A@12V (with relay)	10W, 2A@5V (with relay)	4.5W, 0.9A@5V (without relay)

1 Industrial Computing Solutions

2 Embedded Computing Solutions

3 RISC-Based Embedded Solutions

4 Industrial Data Collector/Server Solutions

5 Video Capture Solutions

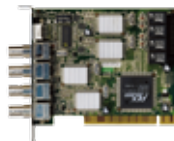
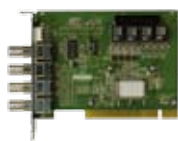
6 I/O Communication Solutions

7 Panel Solutions

8 Power Supply/Network Communication/Peripherals

Video Capture Card Selection Guide

RealTime Video Capture



Model name	IVC-100G-RS		IVC-200G-RS		IVCE-8784		PM-1056	
Formfactor	PCI		PCI		PCIe		PCI-104	
◆ Interface								
Video input	4 channels composite video NTSC / PAL / SECAM auto sensing		4 channels composite video NTSC / PAL / SECAM auto sensing		4 channels composite video NTSC/PAL/SECAM auto sensing		4 channels composite video NTSC/PAL/ SECAM auto sensing	
Video input type	BNC		BNC		BNC		BNC	
Audio Input	N/A		N/A		N/A		4 channels	
Audio input type	N/A		N/A		N/A		DB9 to 3.5mm phone jack audio cable	
PCI / PCI-104 interface	PCI rev 2.1 compliance		PCI rev 2.1 compliance		PCIe x1		PCI Rev 2.1 compliance	
Alarm I/O	Yes		Yes		Yes		Yes	
Card ID	DIP switch selectable with LED for ID indication		DIP switch selectable with LED for ID indication		DIP switch selectable with LED for ID indication		DIP switch selectable with LED for ID indication	
◆ Video processing								
Video compression	Software compression		Software compression		Software compression		Software Compression	
Video engine	1 x Conexant Fusion BT878A		4 x Conexant Fusion BT878A		4 x Conexant Fusion BT878A		1 x Conexant FusionTM BT878A	
Resolution & frame rate	NTSC:	PAL/SECAM :	NTSC:	PAL/SECAM :	NTSC:	PAL/SECAM:	NTSC:	PAL/SECAM:
	720 x 480	720 x 576	720 x 480	720 x 576	720 x 480	720 x 576	720 x 480	720 x 576
	720 x 288	720 x 480	720 x 288	720 x 480	720 x 288	720 x 480	720 x 288	720 x 480
	720 x 240	720 x 288	720 x 240	720 x 288	720 x 240	720 x 288	720 x 240	720 x 288
	640 x 480	720 x 240	640 x 480	720 x 240	640 x 480	720 x 240	640 x 480	720 x 240
	640 x 288	704 x 576	640 x 288	704 x 576	640 x 288	704 x 576	640 x 288	704 x 576
	640 x 240	640 x 480	640 x 240	640 x 480	640 x 240	640 x 480	640 x 240	640 x 480
	352 x 288	640 x 288	352 x 288	640 x 288	352 x 288	640 x 288	352 x 288	640 x 288
	352 x 240	640 x 240	352 x 240	640 x 240	352 x 240	640 x 240	352 x 240	640 x 240
	320 x 240	352 x 288	320 x 240	352 x 288	320 x 240	352 x 288	320 x 240	352 x 288
240 x 180	352 x 240	240 x 180	352 x 240	240 x 180	352 x 240	240 x 180	352 x 240	
240 x 176	320 x 240	240 x 176	320 x 240	240 x 176	320 x 240	240 x 176	320 x 240	
176 x 144	240 x 180	176 x 144	240 x 180	176 x 144	240 x 180	176 x 144	240 x 180	
160 x 120	240 x 176	160 x 120	240 x 176	160 x 120	240 x 176	160 x 120	240 x 176	
128 x 96	176 x 144	128 x 96	176 x 144	128 x 96	176 x 144	128 x 96	176 x 144	
88 x 72	160 x 120	88 x 72	160 x 120	88 x 72	160 x 120	88 x 72	160 x 120	
80 x 60	128 x 96	80 x 60	128 x 96	80 x 60	128 x 96	80 x 60	128 x 96	
	88 x 72		88 x 72		88 x 72		88 x 72	
	80 x 60		80 x 60		80 x 60		80 x 60	
	NTSC: up to 30fps at all resolutions PAL/SECAM: up to 25fps at all resolutions		NTSC: up to 120fps at all resolutions PAL/SECAM: up to 100fps at all resolutions		NTSC: up to 120fps at all resolutions PAL/SECAM: up to 100fps at all resolutions		NTSC: Total 30fps @D1 for 4 channels PAL/SECAM: 25fps @D1 for 4 channels	
◆ Audio processing								
Audio compression	N/A		N/A		N/A		N/A	
Sampling rate	N/A		N/A		N/A		N/A	
Quantization	N/A		N/A		N/A		N/A	
◆ Functionality								
Video /audio synchronization	N/A		N/A		Yes		Yes	
Video loss detection	Yes		Yes		Yes		Yes	
On-screen display	Yes		Yes		Yes		Yes	
Motion detection	N/A		N/A		Yes		Yes	
Watermarking	N/A		N/A		N/A		N/A	
◆ System requirement								
System	x86 compatible computer		x86 compatible computer		x86 compatible computer		x86 PC compatible computer	
Memory	256 MB or above		256 MB or above		256 MB or above		256 MB or above	
Graphic	DirectX compatible VGA card supporting YUV overlay mode		DirectX compatible VGA card supporting YUV overlay mode		DirectX compatible VGA card supporting YUV overlay mode		DirectX compatible VGA card supporting YUV overlay mode	
◆ Software support								
Device driver	Windows® 98 SE, ME, 2000, XP Linux kernel 2.4		Windows® 98 SE, ME, 2000, XP Linux kernel 2.4		Windows® 98, SE, ME, 2000, XP		Windows 98 SE, ME, 2000, XP, Linux kernel 2.4	
SDK	Provide SDK and demo program with sample source code in C++		Provide SDK and demo program with sample source code in C++		Provide SDK and demo program with sample source code in C++		Provide SDK and demo program with sample source code in C++	
Surveillance software support	No		No		No		No	
◆ Others								
Dimensions	119.91 mm x 106.68 mm		119.91 mm x 106.68 mm		11 9.91 mm x 106.68 mm		95.89 mm x 90.17 mm	
Operation temperature	0°C~60°C (32°F~140°F), non-condensing		0°C~60°C (32°F~140°F), non-condensing		0°C~60°C (32°F~140°F), non-condensing		0°C~60°C (32°F~140°F), non-condensing	
Power consumption	10.7W, 2.14A@5V (with relay)		15W, 3A@5V (with relay)		7.8W, 0.65A@12V (without relay)		3.5W@5V (with relay)	

1
Industrial
Computing
Solutions

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Embedded
Computing
Solutions

3
RISC-Based
Embedded
Solutions

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Industrial
Data
Collector/
Server
Solutions

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Video
Capture
Solutions

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I/O
Communication
Solutions

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Panel
Solutions

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Power Supply/
Network
Communication/
Peripherals

Video Capture Card Selection Guide

MPEG 4 Hardware Compression

RealTime Audio/Video Capture

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8 Power Supply/Network Communication/Peripherals



Softlogic Solo6010 + Techwell TW6805

Hardware Encode / Decode



PentaMicro AT2401

Hardware Encode / Decode



PentaMicro AT2401

Model name	IVC-368G-4CH	IVC-8371P	PM-1059
Formfactor	PCI	PCI	PCI-104
◆ Interface			
Video input	4 channels composite video NTSC/PAL/SECAM auto sensing	4 channels Composite video NTSC/PAL/SECAM	4 channels composite video NTSC/PAL/SECAM auto sensing
Video input type	DB-25 Connector	BNC	BNC
Audio input	4 channels analog audio	4 channels	4 channels
Audio input type	Audio kit with DB-25 connector together	DB9 to 3.5mm phone jack audio cable	DB9 to 3.5 mm phone jack audio cable
PCI / PCI-104 interface	PCI 2.2 compliance	PCI Rev 2.1 compliance	PCI Rev 2.1 compliance
Alarm I/O	External GPIO daughter board with 4 inputs and 4 outputs (optional)	Yes	Yes
Card ID	selectable with LED for ID indication	DIP switch selectable	DIP switch selectable

◆ Video processing

Video compression	MPEG4 Video Encoder - ISO/IEC 1496-2 MPEG4 SOP@LEVEL 1,2,3 - Dual Speed Full Hardwired MPEG4 Core	MPEG 4 Advanced Simple Profile @ Level 5 (ISO/IEC 14496-2) MPEG-2 Main Profile @ Main Level (ISO/IEC 13818-2) MPEG-1 (ISO/IEC 11172-2) H.263 (ITU-T Recommendation H.263)	MPEG 4 Advanced Simple Profile @ Level 5 (ISO/IEC 14496-2) MPEG-2 Main Profile @ Main Level (ISO/IEC 13818-2) MPEG-1 (ISO/IEC 11172-2)
Video engine	MPEG4 Video Hardware Encoder	MPEG 4 Hardware Encode / Decode	MPEG 4 Hardware Encode / Decode
Resolution & frame rate	NTSC: 704 x 480 704 x 240 352 x 240 176 x 112	PAL / SECAM: 704 x 480 704 x 240 352 x 240 176 x 112	NTSC: 720 x 480 720 x 240 640 x 480 640 x 240 360 x 240 320 x 240
		PAL / SECAM : 720 x 576 720 x 288 640 x 576 640 x 288 360 x 288 320 x 288	PAL / SECAM: 720 x 576 720 x 288 640 x 576 640 x 288 360 x 288 320 x 288
	NTSC: Total 120fps@D1 for 4 channels PAL/SEACAM: 100fps@D1 for 4 channels	NTSC: Total 30fps@D1 for 4 channels PAL/SEACAM: Total 25fps@D1 for 4 channels	NTSC: Total 30fps @D1 for 4 channels PAL/SECAM: 25fps @D1 for 4 channels

◆ Audio processing

Audio compression	G.723 Voice CODEC (ADPCM/PCM)	Encoding StandardG.726 (ADPCM/PCM)	G.726(ADPCM/PCM)
Sampling rate	8K, 16KHz (Hardware Spec.)	8K, 44.1 KHz and 48 KHz	8K, 44.1 KHz and 48 KHz
Quantization	8K, 16K (Hardware Spec.)	8 bit data depth	8-bit data depth

◆ Functionality

Video /audio synchronization	Yes	Yes	Yes
Video loss detection	Yes	Yes	Yes
On-screen display	Yes	Yes	Yes
Motion detection	Yes	Hardware built-in	Hardware build-in
Watermarking	Yes	128 bit secrete key, adjustable length	128-bit secrete key, adjustable length

◆ System requirement

System	x86 PC compatible computer	x86 PC compatible computer	x86 compatible computer
Memory		256MB or above	256 MB or above
Graphic	DirectX compatible VGA card with YUV overlay mode supporting.	DirectX compatible VGA card supporting YUV overlay mode	DirectX compatible VGA card supporting YUV overlay mode

◆ Software support

Device driver	Windows XP, Linux Kernel 2.6	Windows 2000/ XP	Windows@ 2000, XP
SDK	Provide SDK and demo program with sample source code in C++	Provide SDK and demo program Complete source code of demo program in C++	Provide SDK and demo program with source code in C++
Surveillance software support		No	No

◆ Others

Dimensions	119.91mm x 106.68mm	119.91mm x 106.68mm	95.89 mm x 90.17 mm
Operation temperature	0°C~60°C (32°F~140°F), non-condensing		
Power consumption	1.8W, 0.36A@5V	7.5W, 1.5A@5V (without relay)	7.5W, 1.5A@5V (without relay)